

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-21. (Cancelled).

22. (Currently amended) A wood-polymer composite, comprising wood impregnated with material and/or a wood-based material containing a polymer of at least one polymerizable monomers monomer selected from the group consisting of styrene, methylstyrene and tertiary butylstyrene that have been polymerized in the wood, ~~the polymerization being initiated with at least three initiators; said monomers being crosslinked with divinyl benzene, ethylene glycol dimethacrylate, 1,3-butylene glycol dimethacrylate, ethylene glycol trimethacrylate or trimethylol propane trimethacrylate and said composite containing oil or wax as a polymerization moderator and water repellent for the composite~~ said composite being prepared by the steps of:  
providing wood material and/or wood-based material having a moisture content of from about 15 to about 35% based on the weight of said material; impregnating said material with a composition comprising at least one polymerizable monomer selected from the group consisting of styrene, methylstyrene and tertiary butylstyrene, at least three polymerization initiators selected from low, medium, and high temperature initiators, wherein the at least one low temperature initiator is at least 0.1% based on the weight of the at least one polymerizable monomer of at least one initiator selected from the group consisting of 2,2'-azobis (2-methyl-butanenitrile), benzoyl peroxide, 2,2'-azobis (2,4-dimethyl-pentanenitrile), and 2,2'-azobis (2-methyl-propanenitrile), wherein the at least one medium temperature initiator is at least 0.1% based on the

weight of the at least one polymerizable monomer of 1,1'-azobis  
(cyclohexanecarbonitrile), and wherein the at least one high temperature initiator is at  
least 0.5% based on the weight of the at least one polymerizable monomer of at least  
one initiator selected from the group consisting of tertiary butyl perbenzoate and  
di-tertiary butyl peroxide, and divinyl benzene, ethylene glycol dimethacrylate,  
1,3-butylene glycol dimethacrylate, ethylene glycol trimethacrylate or trimethylol  
propane trimethacrylate as a crosslinking agent; and curing said impregnated material  
with heat to a temperature sufficient to polymerize and crosslink the at least one  
polymerizable monomer in the material.

23. (Currently amended) The wood-polymer composite according to claim 22, wherein said polymerizable monomers are styrene, para-methyl styrene, tertiary butylstyrene and combinations thereof.

24. (Cancelled).

25. (Currently amended) The wood-polymer composite according to claim 22, wherein said ~~polymerizable monomers~~ polymer present in the composite as ~~polymerized monomers are~~ is distributed throughout the whole of said composite.

26. (Currently amended) The wood-polymer composite according to claim 22, wherein said ~~polymerizable monomers~~ polymer present in the composite as ~~polymerized monomers are~~ is distributed within a shell that extends ~~[[from]]~~ to a depth of 2mm below exterior surfaces of the composite ~~to a deeper depth~~.

27. (Currently amended) The wood-polymer composite according to claim 22, wherein said composite containing said ~~polymerizable monomers~~ polymer has a density of from about 0,8 g/cc to about 1,2 g/cc.

28. (Cancelled).
29. (Previously presented) The wood-polymer composite according to claim 22, wherein said composite is a round, sawn or laminated wood product.
30. (Previously presented) The wood-polymer composite according to claim 29, wherein the wood product is a railway sleeper.
31. (Previously presented) The wood-polymer composite according to claim 29, wherein the wood product is a pole.